APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,488	02/06/2004	John Christopher Van Gorp	6270/134	6634

46260   7590   09/05/2008
BRINKS HOFER GILSON & LIONE/PML
PO BOX 10395
CHICAGO, IL 60610

EXAMINER
VETTER, DANIEL

ART UNIT	PAPER NUMBER
3628	

MAIL DATE	DELIVERY MODE
09/05/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/773,488	VAN GORP ET AL.
	Examiner	Art Unit	
	DANIEL P. VETTER	3628	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
> WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
>   after SIX (6) MONTHS from the mailing date of this communication.
> - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
> - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
>   Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
>   earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *13 June 2008*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>40,42-53,55-79 and 81-86</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>40,42-53,55-79 and 81-86</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

1.   Claims 40-79 and 81-86 were previously pending in this application. Claims 40, 42, 57-60, 62, 63, 65, 66, 70, 71, 74-79, 81, and 82 were amended, and claims 41 and 54 were canceled in the reply filed June 13, 2008. Claims 40, 42-53, 55-79, and 81-86 are currently pending in this application.

Continued Examination Under 37 CFR 1.114

2.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 13, 2008 has been entered.

Response to Arguments

3.   Applicant's amendment to claim 40 overcomes the objection to this claim and it is withdrawn.

4.   Applicant's amendments overcome the rejections of claims 57, 59, 62, 66, 70, 71, and 82-85 under § 112, second paragraph, and these are withdrawn.

5.   Applicant's arguments with respect to the rejections made under §§ 102(e) and 103(a) have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

6.   Claims 40, 44, 56, 81, 82 and 86 are objected to because of the following informalities: the claims are presented in an improper alternative limitation format. The use of the term "comprising" leaves the Markush groups that immediately follow in each claim open-ended (e.g., line 9 of claim 40). Proper alternative limitations use closed-

ended language such as "is" or "consists of." See MPEP § 2173.05(h). Appropriate
correction is required.

7.   Examiner requests that the actions/steps positively recited in claims 42, 55, 67,
69, 72, and 73 be amended to track the changes made to, *inter alia*, claims 58-60.
Specifically, that the apparatus is "operative to" perform certain activities rather than
reciting the apparatus actually performing them, to avoid confusion as to the scope of
the claim. *See IPXL Holdings v. Amazon.com, Inc.*, 430 F.2d 1377, 1384, 77 USPQ2d
1140, 1145 (Fed. Cir. 2005) (single claim to both apparatus and manner of using it held
indefinite).

Claim Rejections - 35 USC § 101

8.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

9.   Claims 40, 42-53, 55-79, and 82-86 are rejected under 35 U.S.C. 101 because
the claimed invention is directed to non-statutory subject matter.

10.   Claims 40, 42-53, 55-79, and 86 are directed to a "rate engine." The
Specification provides that "[i]n one embodiment, the Rate Engine 106 may be
implemented as a hardware device, in an alternate embodiment the <u>Rate Engine 106 is
a software product with program modules</u> that run on a personal or mainframe computer
with supporting hardware/software and network connections." Specification, ¶ 0019 of
the published application (emphasis added). In other words, one of the embodiments of
a "rate engine" refers to the software or program code alone, and not hardware on
which it is embodied and executed. Claims directed to software *per se* are not
patentable subject matter. *In re Warmerdam*, 33 F.3d 1354, 1361, 31 USPQ2d 1754,
1760 (Fed. Cir. 1994). In order to be patentable under § 101, the claims must be
amended to exclude these embodiments. When functional descriptive material such as
a computer program is structurally and functionally interrelated with a medium as
claimed to allow its intended uses to be realized, it becomes statutory. Claims 82-85

are directed to a "system," however the system consists entirely of the above "rate engine." While claims 83-85 appear to recite certain network elements, its unclear in light of the Specification if these are intended specifically to be hardware elements or mere software modules. It is also unclear how they are interrelated with claimed "rate engine," and thus the functional relationships needed to impart patentability under § 101 are not readily apparent. For the purposes of the § 112, sixth paragraph, limitations recited in claim 81, examiner is interpreting the corresponding structure disclosed in the Specification to include the hardware elements necessary to execute the software performing the recited functions, and thus the claim is directed to statutory subject matter. See MPEP § 2106.01 for further guidance and discussion on computer-related nonstatutory subject matter.

Claim Rejections - 35 USC § 112

11.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12.   Claims 40, 42-53, 55-79, and 81-86 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13.   Claim 40 recites "at least one logging interval" (line 3) and "at least one cost" (lines 4-5). As amended, the claim subsequently recites "at least a first logging interval to compute a first cost associated with the first logging interval" (lines 12-13) and "at least a second logging interval to compute a second cost associated with the second logging interval" (lines 14-16). The relationship between these costs is unclear such that the true scope of the claim is vague and indefinite. Put differently, the number of logging intervals and calculated costs required to meet the limitations of the claim is not apparent. If the intervals/costs are all distinct and a total of three are required, further differentiation of the initially recited "at least one logging interval" and "at least one cost" would be required. Alternatively, if the subsequently recited "first" and "second"

intervals/costs are intended to comprise those initially recited, this should be noted in the claims by properly referring back to their antecedents. Independent claims 81 and 82 contain similar recitations. Dependent claims 42-53, 55-79, and 83-86 inherit the above deficiencies through dependency and, as such, are rejected for the same reasons. In addition, many of these claims on their own refer generically to logging intervals and costs without noting their relationships/distinctions from those initially recited. The claims do not properly apprise the public as to what would constitute infringement, and accordingly a rejection under § 112, second paragraph is required.

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15.   Claims 40, 43-58, 73-79, and 81-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis, U.S. Pat. Pub. No. 2003/0009401 (Reference A of the PTO-892 part of paper no. 20070808).

16.   As per claim 40, Ellis teaches a rate engine for use in a utility distribution system, comprising: an input module operative to accept utility data, rate data and time data (¶¶ 0323-24), the time data including a time interval composed of at least one logging interval (¶ 0328); a processing module coupled with the input module and operative to compute at least one cost based on the utility data and rate data (¶ 0323), the at least one cost being associated with the logging interval (¶ 0331); and an output module coupled with the processing module (¶ 0325), wherein the rate data comprises at least one of one tariff, a plurality of tariffs, and real time pricing (¶ 0330), wherein the rate data comprises a plurality of charges (¶ 0326), wherein the processing module is operative to apply a first charge to at least a first logging interval to compute a first cost

associated with the first logging interval; wherein; and wherein the output module is operative to provide an output including at least the first cost (Fig. 7A).

Ellis does not explicitly teach the processing module is operative to apply a second charge to at least a second logging interval to compute a second cost associated with the second logging interval, and that the second cost is included in the output. However, this is merely a repetition of the operation on the first logging interval. Ellis teaches that the user is free to specify any desired interval for processing (¶ 0336). Ellis also teaches that data gathering can occur at frequent more frequent intervals than simply the standard billing cycle (¶ 0321). The only modifications necessary to Ellis to teach the claimed invention would be to duplicate the input screen shown in Fig. 6B for the second logging interval, and duplicate the output screen shown in Fig. 7 to include the second cost. The processing of the data occurs the same way for both intervals. Thus, adding a second interval to process and outputting the cost along with the first would only require routine engineering, and this modification would yield no unpredictable results. It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate the processing a second logging interval because it is merely the repetition of a process already shown in the prior art, and the results would be predictable.

17.   As per claim 42, Ellis teaches the rate engine of claim 40 as described above. Ellis further teaches the time interval comprises a plurality of logging intervals (¶ 0328), and the at least one cost comprises a plurality of costs (¶ 0326), wherein each of the plurality of costs is associated with one of the plurality of logging intervals (¶ 0335), and the plurality of costs is outputted by the output module (¶ 0325).

18.   As per claim 43, Ellis teaches the rate engine of claim 42 as described above. Ellis further teaches a communication interface coupled with said input module and operative to receive said utility data from at least one measuring device via a network (¶ 0312).

19.   As per claim 44, Ellis teaches the rate engine of claim 43 as described above. Ellis further teaches the utility data comprises at least one of water data, gas data, air

data, steam data, emissions data, bandwidth data, and Million Instructions Per Second (MIPS) data (¶ 0383).

20.   As per claim 45, Ellis teaches the rate engine of claim 43 as described above. Ellis further teaches the utility data comprises electrical data (¶ 0383).

21.   As per claim 46, Ellis teaches the rate engine of claim 43 as described above. Ellis further teaches the utility data comprises hypothetical data (¶ 0334).

22.   As per claim 47, Ellis teaches the rate engine of claim 46 as described above. Ellis further teaches the hypothetical data represents at least one of data in the past, data in the future, data that has been scaled, data that has been shifted, data that has been estimated, and data that has been edited (¶ 0334).

23.   As per claim 48, Ellis teaches the rate engine of claim 42 as described above. Ellis further teaches the plurality of logging intervals span a time period associated with bill to date (¶ 0331).

24.   As per claim 49, Ellis teaches the rate engine of claim 48 as described above. Ellis further teaches the utility data comprises electrical data (¶ 0383).

25.   As per claim 50, Ellis teaches the rate engine of claim 42 as described above. Ellis further teaches the plurality of logging intervals span a time period associated with more than one billing period (¶ 0336).

26.   As per claim 51, Ellis teaches the rate engine of claim 50 as described above. Ellis further teaches the utility data comprises electrical data (¶ 0383).

27.   As per claim 52, Ellis teaches the rate engine of claim 42 as described above. Ellis further teaches the plurality of logging intervals span a time period associated with more than one tariff (¶ 0330).

28.   As per claim 53, Ellis teaches the rate engine of claim 42 as described above. Ellis further teaches the plurality of logging intervals span a time period associated with one billing period (¶ 0321), and further wherein the utility data comprises both electrical data and hypothetical data (¶ 0334).

29.   As per claim 55, Ellis teaches the rate engine of claim 42 as described above.
Ellis further teaches the input module accepts meta data (¶ 0321) and the output
module outputs the meta data with the plurality of costs (¶ 0339).

30.   As per claim 56, Ellis teaches the rate engine of claim 55 as described above.
Ellis further teaches the meta data further comprises at least one of a cost center
identifier and a billing period identifier (¶ 0340).

31.   As per claim 57, Ellis teaches the rate engine of claim 42 as described above.
Ellis further teaches the processing module is operative to perform a calculation in
which a charge for the time interval is distributed evenly across the plurality of logging
intervals (¶ 0275).

32.   As per claim 58, Ellis teaches the rate engine of claim 42 as described above.
Ellis further teaches the processing module is operative to determine a spanning
interval, the spanning interval having a plurality of spanning logging intervals; and
distribute each of the plurality of charges evenly across the plurality of spanning logging
intervals (¶ 0278).

33.   As per claim 73, Ellis teaches the rate engine of claim 42 as described above.
Ellis further teaches at least one of the plurality of charges is not billed on a logging
interval basis (¶ 0273).

34.   As per claim 74, Ellis teaches the rate engine of claim 42 as described above.
Ellis further teaches the utility data comprises data for at least one resource (¶ 0312),
further wherein the processing module is operative to: vary the value of the at least one
resource to create a plurality of hypothetical values (¶ 0334); combines each of the
plurality of hypothetical values with the rate data to create a plurality of hypothetical
costs (¶ 0334), wherein each of the plurality of hypothetical costs is associated with one
of the plurality of hypothetical values (¶ 0334); and outputs the plurality of hypothetical
costs (¶ 0334).

35.   As per claim 75, Ellis teaches the rate engine of claim 74 as described above.
Ellis further teaches the processing module is operative to vary the value of the at least
one resource by percentage increments (¶ 0334).

36.   As per claim 76, Ellis teaches the rate engine of claim 74 as described above. Ellis further teaches the processing module is operative to vary the value of the at least one resource by unit increments (¶ 0335).

37.   As per claim 77, Ellis teaches the rate engine of claim 74 as described above. Ellis further teaches the at least one logging interval comprises a plurality of logging intervals (¶ 0328), further wherein the processing module is operative to repeat for each logging interval the creating the hypothetical values (¶¶ 0344, 0360), the combining the plurality of hypothetical values with the rate data to create a plurality of hypothetical costs and outputting the plurality of hypothetical costs (¶ 0334).

38.   As per claim 78, Ellis teaches the rate engine of claim 77 as described above. Ellis further teaches the utility data comprises a plurality of resource data (¶ 0312), further wherein the processing module is operative to repeat for each of the plurality of resource data (¶ 0360), repeating for each logging interval the creating the hypothetical values (¶¶ 0344, 0360), the combining the plurality of hypothetical values with the rate data to create a plurality of hypothetical costs and outputting the plurality of hypothetical costs (¶ 0344).

39.   As per claim 79, Ellis teaches the rate engine of claim 78 as described above. Ellis further teaches the processing module is operative to identify logging intervals where the hypothetical costs are sensitive to variations in the hypothetical values of the resource data (¶ 0344).

40.   As per claim 81, Ellis teaches a system for calculating the per logging interval cost of a utility, comprising: means for accepting utility data, rate data and time data from a data source (¶¶ 0323-24), the time data comprising a plurality of logging intervals (¶ 0331); means for computing a plurality of costs based on the utility data and rate data, each of the plurality of costs being associated with one of the plurality of logging intervals (¶ 0323); and means for outputting the plurality of costs (¶ 0325), wherein the rate data comprises at least one of one tariff, a plurality of tariffs, and real time pricing (¶ 0330), wherein the rate data comprises a plurality of charges (¶ 0326), wherein the means for computing is operative to apply a first charge to at least a first logging interval

to compute a first cost associated with the first logging interval; and wherein the means for outputting the plurality of costs is operative to provide an output including at least the first costs (Fig. 7A).

Ellis does not explicitly teach the means for computing is operative to apply a second charge to at least a second logging interval to compute a second cost associated with the second logging interval, and that the second cost is included in the output. However, this is merely a repetition of the operation on the first logging interval. Ellis teaches that the user is free to specify any desired interval for processing (¶ 0336). Ellis also teaches that data gathering can occur at frequent more frequent intervals than simply the standard billing cycle (¶ 0321). The only modifications necessary to Ellis to teach the claimed invention would be to duplicate the input screen shown in Fig. 6B for the second logging interval, and duplicate the output screen shown in Fig. 7 to include the second cost. The processing of the data occurs the same way for both intervals. Thus, adding a second interval to process and outputting the cost along with the first would only require routine engineering, and this modification would yield no unpredictable results. It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate the processing a second logging interval because it is merely the repetition of a process already shown in the prior art, and the results would be predictable.

41.   As per claim 82, Ellis teaches a system for calculating the per logging interval cost of a utility, the system comprising: a rate engine, the rate engine having: an input module operative to accept utility data, rate data and time data (¶¶ 0323-24), the time data comprising at least one time interval composed of a plurality of logging intervals (¶ 0331); a processing module coupled with the input module and operative to compute a plurality of costs based on the utility data and rate data, each of the plurality of costs being associated with one of the logging intervals (¶ 0323); and an output module coupled with the processing module (¶ 0325), wherein the rate data comprises at least one of one tariff, a plurality of tariffs, and real time pricing (¶ 0330), wherein the rate data comprises a plurality of charges (¶ 0326), wherein the processing module is

operative to apply a first charge to at least a first logging interval to compute a first cost
associated with the first logging interval; and wherein the output module is operative to
provide an output including at least the first costs (Fig. 7A).

Ellis does not explicitly teach the processing module is operative to apply a
second charge to at least a second logging interval to compute a second cost
associated with the second logging interval, and that the second cost is included in the
output. However, this is merely a repetition of the operation on the first logging interval.
Ellis teaches that the user is free to specify any desired interval for processing (¶ 0336).
Ellis also teaches that data gathering can occur at frequent more frequent intervals than
simply the standard billing cycle (¶ 0321). The only modifications necessary to Ellis to
teach the claimed invention would be to duplicate the input screen shown in Fig. 6B for
the second logging interval, and duplicate the output screen shown in Fig. 7 to include
the second cost. The processing of the data occurs the same way for both intervals.
Thus, adding a second interval to process and outputting the cost along with the first
would only require routine engineering, and this modification would yield no
unpredictable results. It would have been prima facie obvious to one having ordinary
skill in the art at the time of invention to incorporate the processing a second logging
interval because it is merely the repetition of a process already shown in the prior art,
and the results would be predictable.

42.   As per claim 83, Ellis teaches the system of claim 82 as described above. Ellis
further teaches wherein the rate engine further comprises a communication interface
coupled with said input module and operative to transmit said utility data to said input
module (¶ 0312).

43.   As per claim 84, Ellis teaches the system of claim 83 as described above. Ellis
further teaches a network coupled with said communication interface, and operative to
transmit said utility data to said communication interface (¶ 0312).

44.   As per claim 85, Ellis teaches the system of claim 84 as described above. Ellis
further teaches comprising a measuring device coupled with said network and operative
to generate and transmit said utility data to said network (¶ 0312).

45.   As per claim 86, Ellis teaches the system of claim 46 as described above. Ellis

further teaches the hypothetical data comprises at least one of past data, future data,

scaled data, shifted data, estimated data, edited data, modeled data, and normalized

data (¶ 0334).

46.   Claims 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ellis in view of Chasek, U.S. Pat. No. 5,237,507 (Reference B of the PTO-892 part of

paper no. 20070808).

47.   As per claim 59, Ellis teaches the rate engine of claim 42 as described above.

Ellis does not explicitly teach the processing is operative to compute a calculation in

which one or more charges are distributed based on weighting of another charge; which

is taught by Chasek (col. 2, lines 26-29). It would have been prima facie obvious to one

having ordinary skill in the art at the time of invention to incorporate the above teachings

of Chasek in order to encourage efficient utility use (as taught by Chasek, Abstract).

48.   As per claim 60, Ellis teaches the rate engine of claim 42 as described above.

Ellis further teaches at least one of the plurality of charges comprises a penalty charge

(¶ 0342), and at least one of the plurality of charges comprises a usage charge (¶ 0335)

and further wherein the processing module is operative to determine a spanning

interval, the spanning interval having a plurality of spanning logging intervals (¶ 0278).

Ellis does not explicitly teach the module is operative to calculate a percentage of the

usage charge for each spanning logging interval; and distribute the penalty charge

weighted according to the percentage of the usage charge; which is taught by Chasek

(col. 2, lines 15-22). It would have been prima facie obvious to one having ordinary skill

in the art at the time of invention to incorporate the above teachings of Chasek in order

to encourage efficient utility use (as taught by Chasek, Abstract).

49.   As per claim 61, Ellis in view of Chasek teaches the rate engine of claim 60 as

described above. Ellis further teaches the utility data comprises electrical data (¶ 0383).

50.   Claims 62-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Ellis in view of Williams, Intl. Pat. Pub. No. WO 95/26065 (Reference N of the PTO-892
part of paper no. 20070808).

51.   As per claim 62, Ellis teaches the rate engine of claim 42 as described above.
Ellis does not explicitly teach the processing module is operative to compute a
calculation wherein the at least one cost is determined by iteratively computing a
marginal cost for each of the plurality of logging intervals; which is taught by Williams
(pg. 18). It would have been prima facie obvious to one having ordinary skill in the art at
the time of invention to incorporate the above teachings of Williams into the rate engine
taught by Ellis in order to compute values for sub periods (as taught by Williams, pg.
18).

52.   As per claim 63, Ellis teaches the rate engine of claim 42 as described above.
Ellis further teaches original utility data is associated with each of said plurality of
logging intervals (¶ 0312), and further wherein the processing module is operative to
determine a spanning interval, the spanning interval having a plurality of spanning
logging intervals (¶ 0278); calculate a total cost associated with the spanning interval (¶
0323); and associate the one of said plurality of costs with the one of said plurality of
logging intervals (¶ 0323). Ellis does not teach the module is operative to perform the
following, which are taught by Williams at the indicated sections: set utility data
associated with one of said plurality of logging intervals to a value such that the cost of
the utility data comprises zero for the one of said plurality of logging intervals (pg. 18);
combine the utility data and rate date to create a temporary cost associated with the
spanning interval (pg. 18, ¶ 3); subtract the temporary cost from the total cost to create
one of said plurality of costs (pg. 19, ¶ 4); reset the utility data associated with the one
of said plurality of logging intervals to the original utility data (pg. 19, ¶ 1); and repeat
the setting, combining, subtracting and resetting for the remainder of each of said
plurality of logging intervals (pg. 19, ¶ 2). It would have been prima facie obvious to one
having ordinary skill in the art at the time of invention to incorporate the above teachings

of Williams into the rate engine taught by Ellis in order to determine charges for sub periods (as taught by Williams, pg. 17, ¶ 4).

53.　　As per claim 64, Ellis in view of Williams teaches the rate engine of claim 63 as described above. Ellis further teaches the utility data comprises electrical data (¶ 0383).

54.　　As per claim 65, Ellis in view of Williams teaches the rate engine of claim 63 as described above. Williams further teaches the processing module is operative to scale said plurality of costs (pg. 17, ¶ 3). It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate the above teachings of Williams into the rate engine taught by Ellis in view of Williams in order to account for loss (as taught by Williams, pg. 17, ¶ 3). The limitation "so that the sum of said plurality of costs is equal to said total cost" is a recitation of intended result of another positively recited element (scaling the costs) and is only afforded patentable weight to the extent that it imparts structural limitations on the invention, which are met by Williams (pg. 17).

55.　　As per claim 66, Ellis teaches the rate engine of claim 40 as described above. Ellis does not explicitly teach the processing module is operative to compute a calculation wherein the at least one cost is determined by iteratively computing a marginal cost for each of a plurality of logging intervals, which is taught by Williams (pg. 18). It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate the above teachings of Williams into the rate engine taught by Ellis in order to compute values for sub periods (as taught by Williams, pg. 18).

56.　　Claims 70 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis in view of Chasek and Liebl, et al., U.S. Pat. No. 5,289,362 (Reference C of the PTO-892 part of paper no. 20070808).

57.　　As per claims 70, and 71, Ellis teaches the rate engine of claim 40 as described above. Ellis does not explicitly teach the processing module is operative to compute a calculation wherein the at least one cost is determined by iteratively computing a common cost and evenly distributing the common cost across a plurality of logging

intervals, wherein the common cost is computed for one of a common resource usage shared by the plurality of logging intervals and resource usage; which is taught by Chasek (col. 2, lines 15-22). It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate the above teachings of Chasek in order to encourage efficient utility use (as taught by Chasek, Abstract). Ellis in view of Chasek does not explicitly teach price tier boundaries, which are taught by by Liebl (col. 1, line 66- col. 2, line 9). It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate the above teachings of Liebl into the rate engine taught by Ellis in view of Chasek to allow a customer to minimize electric power costs (as taught by Liebl; col. 1, lines 63-66).

58.   As per claim 71, Ellis teaches the rate engine of claim 40 as described above. Ellis does not explicitly teach the processing module is operative to compute a calculation, wherein the at least one cost is determined by iteratively computing a common cost for a resource usage shared by a plurality of logging intervals and distributing the common cost across the plurality of logging intervals according to resource usage; which is taught by Chasek (col. 2, lines 15-22). It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate the above teachings of Chasek in order to encourage efficient utility use (as taught by Chasek, Abstract). Ellis in view of Chasek does not explicitly teach price tier boundaries, which are taught by by Liebl (col. 1, line 66- col. 2, line 9). It would have been prima facie obvious to one having ordinary skill in the art at the time of invention to incorporate the above teachings of Liebl into the rate engine taught by Ellis in view of Chasek to allow a customer to minimize electric power costs (as taught by Liebl; col. 1, lines 63-66).

Allowable Subject Matter

59.   Claims 67-69 and 72 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

60.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL P. VETTER whose telephone number is (571)270-1366. The examiner can normally be reached on Monday through Thursday from 8am to 6pm.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on (571) 272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN W HAYES/
Supervisory Patent Examiner, Art Unit 3628